



QUARTERLY LETTER OF INFORMATION OF THE FEDERAL HORTICULTURAL BOARD
UNITED STATES DEPARTMENT OF AGRICULTURE.

No. 31.

APRIL, 1919.

NURSERY STOCK, PLANT, AND SEED QUARANTINE.

The attention of all inspectors engaged in the examination of foreign nursery stock is called to amendments Nos. 1 and 2 of the Regulations Supplemental to Notice of Quarantine No. 37.

Amendment No. 1 applies to Regulation No. 3 and provides that the requirement as to freedom from sand, soil, or earth shall not apply to sand, soil, or earth used for packing the articles enumerated in item No. 1 of this regulation when such sand, soil, or earth has been previously sterilized in accordance with methods prescribed by the Federal Horticultural Board under the supervision of a duly authorized inspector of the country of origin. Such sterilization shall be certified to by the duly authorized inspector of the country of origin.

Amendment No. 2 applies to Regulation No. 14, and provides for special permits for the importation, in limited quantities, of prohibited stock, under safeguards to be prescribed in such permits, of nursery stock and other plants and seeds not covered by the preceding regulations, for the purpose of keeping the country supplied with new varieties and necessary propagating stock; provided that this shall not apply to nursery stock and other plants and seeds covered by special quarantines and other restrictive orders now in force, nor to such as may hereafter be made the subject of special quarantines.

C. L. MARLATT, *Chairman of Board.*

NOTES ON ENTOMOLOGICAL INTERCEPTIONS.

Three shipments of cottonseed were intercepted during the past quarter infested with the pink bollworm (*Pectinophora gossypiella*). Two of these shipments originated in China and the third in Angola, Africa. One nest of the brown-tail moth (*Euproctis chrysorrhoea*) was taken on rose stock from France and two egg masses of the gipsy moth (*Parthetria dispar*) were collected on apple and Manetti stocks from the same country. Larvae of the gold-tail moth (*Porthesia similis*) were found on *Acer atrapupurea* from Holland, and the sorrel cutworm (*Acronycta rumicis*) was taken on miscellaneous plants from France and Holland.

The European mole cricket (*Gryllotalpa gryllotalpa*) was taken in soil around azaleas from Holland. The finding of this insect in the soil around plants confirms the belief that the introduction several years ago in New Jersey was brought about by balled plants. Other soil insects were intercepted, notably *Carabus nemoralis* in soil around juniper roots and an Otiorynchid larva in soil around roots of a conifer.

E. R. SASSCER, *Chief Inspector.*

**LIST, BY COUNTRIES, OF PESTS COLLECTED AND REPORTED FROM JAN. 1, TO MAR. 31, 1919,
INCLUSIVE.**

[The number in parentheses following name of host indicates the number of times reported, if collected more than once.]

| Country of origin and name of pest. | Host. |
|---|------------------------------|
| AFRICA. | |
| Insects: | |
| Pectinophora gossypiella (pink bollworm)..... | Cotton. |
| Scolytid..... | Apple (mealy). |
| Disease: | |
| Claviceps purpurea..... | Phalaris carulescens (seed). |
| ARABIA. | |
| Insects: | |
| Rhizopertha dominica (lesser grain borer)..... | Cordeauxia edulia. |
| Silvanus surinamensis (saw-toothed grain beetle)..... | Do. |
| Tribolium confusum (confused flour beetle)..... | Do. |
| ARGENTINA. | |
| Insect: | |
| Phthorimaea operculella (Gelechiidae)..... | Potatoes. |
| AUSTRALIA. | |
| Insect: | |
| Calandra granaria (granary weevil)..... | Zea mays (giant white). |
| BAHAMA ISLANDS. | |
| Insect: | |
| Plectoptera floridana (Blattidae)..... | Bamboo (creeping). |
| BRAZIL. | |
| Insects: | |
| Bruchus sp. (weevil)..... | (?) |
| Caryoborus sp. (Bruchidae)..... | Orbignia graciosa. |
| Do..... | (?) |
| Catorama sp. (Ptinidae)..... | (?) |
| Pentatomid..... | Grass seed. |
| Phalacrus sp. (Phalacridae)..... | Paspalum sp. |
| Phanerotoma sp. (Braconidae)..... | (?) |
| Pyralid..... | (?) |
| Diseases: | |
| Phyllachora sp..... | Andropogon. |
| Do..... | Panicum geminatum. |
| Sclerotinia sp..... | Raphanus sativus (seeds). |
| Ustilago sp..... | Panicum geminatum (seeds). |
| CHINA. | |
| Insects: | |
| Araecerus fasciculatus (coffee bean weevil)..... | Mangifera indica. |
| Bruchus sp. (weevil)..... | Vigna. |
| Calandra oryza maidis (rice weevil)..... | Litchi chinensis. |
| Cathartus advena (foreign grain beetle)..... | Citrus fruits. |
| Do..... | Litchi chinensis (3). |
| Chionaspis citri (scale insect)..... | Citrus nobilis. |
| Pectinophora gossypiella (pink bollworm)..... | Cotton seed (2). |
| COLOMBIA. | |
| Insect: | |
| Diaspis echinocacti cacti (scale insect)..... | Opuntia. |
| CUBA. | |
| Insect: | |
| Lepidosaphes beckii (purple scale)..... | Rangpur lime. |
| ECUADOR. | |
| Insects: | |
| Anthocorid..... | Potato (tubers). |
| Anthocoris sp. (Anthocoridae)..... | Carica wood. |
| Bruchid..... | Prosopis horrida. |
| Bruchus ipomeae (Bruchidae)..... | Ipomoea (2). |

List, by countries, of pests collected and reported from Jan. 1 to Mar. 31, 1919, inclusive—Continued.

| Country of origin and name of pest. | Host. |
|--|---------------------------------|
| ECUADOR—continued. | |
| Insects—Continued. | |
| Carpophilus dimidiatus (Nitidulidae)..... | Oxalis (tubers). |
| Cathartus advena (foreign grain beetle)..... | Potato (tubers). |
| Lasiophilus sp. (Anthracidae)..... | Beans. |
| Olethreutes sp. (Tortricidae)..... | Legume. |
| Rhyssalus sp. (Curculionidae)..... | Ipomoea. |
| Zelus sp. (Reduviidae)..... | Potato (tubers). |
| Diseases: | |
| Colletotrichum sp. | Orchids. |
| Vermicularia sp. | Do. |
| ENGLAND. | |
| Insects: | |
| Emphytus cinctus (sawfly) | Manetti rose stocks (3). |
| Do | Rose stocks (3). |
| Lepidosaphes ulmi (oyster-shell scale)..... | Apple. |
| Diseases: | |
| Bacterium tumefaciens (crown gall) | Manetti rose stocks (2). |
| Do | Rose stocks. |
| Fusarium oxysporum | Solanum tuberosum (tubers). |
| Phytophthora infestans | Do. |
| Rhizoctonia | Do. |
| FRANCE. | |
| Insects: | |
| Acronycta rumicis (sorrel cutworm) | Pear. |
| Do | Quince. |
| Diaspis carueli (juniper scale) | Thuya orientalis. |
| Emphytus cinctus (sawfly) | Fruit stocks. |
| Do | Manetti rose stocks (4). |
| Do | Rose stocks. |
| Euproctis chrysorrhoea (brown tail moth)..... | Rose. |
| Lecanium corni (European fruit Lecanium)..... | Ampelopsis engelmanni. |
| Lepidosaphes ulmi (oyster-shell scale)..... | Boxwood. |
| Magdalis sp. (Curculionidae)..... | Cydonia japonica. |
| Notolophus antiqua (European tussock moth)..... | Pear seedling. |
| Odynerus sp. (Eumenidae)..... | Fruit stock. |
| Pemphigus bursarius (Aphididae)..... | Lombardy poplar. |
| Porthetria dispar (gipsy moth) | Apple. |
| Do | Manetti stocks. |
| Pyralis farinalis (Pyralidae)..... | French hyacinth (bulbs) |
| Do | Narcissus (bulbs). |
| Diseases: | |
| Bacterium tumefaciens (crown gall) | Ampelopsis engelmanni. |
| Do | Eleagnus longipes. |
| Do | Fruit stocks. |
| Do | Pear. |
| Do | Poplar. |
| Do | Manetti rose stocks (3). |
| Do | Rose stocks (2). |
| Bacterium tumefaciens (crown gall and hairy root)..... | Fruit stocks. |
| Bacterium tumefaciens (hairy root)..... | Apple seedlings. |
| Do | Plum seedlings. |
| Do | Quince seedling. |
| HAWAII. | |
| Insects: | |
| Microceromasia sphenophori (Muscidae)..... | Sugar cane. |
| Saissetia nigra (scale insect)..... | Kokia drynarioides. |
| Sphenophorus obscurus (sugar-cane borer) | Sugar cane. |
| HOLLAND. | |
| Insects: | |
| Acronycta rumicis (Noctuidae)..... | Azalea amoena. |
| Agonopterix ocellana (Oecophoridae)..... | Boxwood. |
| Do | Rhododendrons. |
| Carabus nemoralis (Carabidae)..... | In soil (around juniper roots). |

List, by countries, of pests collected and reported from Jan. 1 to Mar. 31, 1919, inclusive—Continued.

| Country of origin and name of pest. | Host. |
|---|---------------------------------|
| HOLLAND—continued. | |
| Insects—Continued. | |
| Curculionid..... | (?). |
| Diaspis carueli (scale insect)..... | Thuja occidentalis. |
| Emphytus cinctus (sawfly)..... | Manetti stocks. |
| Gryllotalpa gryllotalpa (common European mole cricket)..... | Azaleas (soil around). |
| Julus sp. (milleped)..... | Hydrangea. |
| Lecanium corni (European fruit Lecanium)..... | Boxwood (8). |
| Lecanium fletcheri (scale insect)..... | Thuja occidentalis. |
| Do..... | Thuja occidentalis lutea. |
| Lecanium sp..... | Boxwood. |
| Lepidosaphes ulmi (oyster-shell scale)..... | Boxwood (31). |
| Do..... | (?). |
| Leptobyrsa explanata (Tingitidae)..... | Rhododendrons (2). |
| Limoniuss sp..... | Narcissus (bulbs). |
| Malacosoma disstria (forest tent caterpillar)..... | Andromeda floribunda. |
| Malacosoma sp. (Lasiocampidae)..... | Do. |
| Otiorynchid..... | In soil (around conifer roots). |
| Phytomyza aquifolii (Agromyzidae)..... | Holly (2). |
| Porthesia similis (gold-tail moth)..... | Acer atrapupurea. |
| Psylla buxi (box psylla)..... | Boxwood (11). |
| Psylla sp. (Psyllidae)..... | Boxwood. |
| Saissetia hemisphaerica (hemispherical scale)..... | Do. |
| Diseases: | |
| Bacterium tumefaciens (crown gall)..... | Azalea. |
| Do..... | Azalea mallis hybrids. |
| Do..... | Azalea narcissiflora. |
| Do..... | Manetti stocks (2). |
| Do..... | Rhododendron. |
| Botrytis cinera..... | Rhododendron (3). |
| Botrytis sp..... | Rhododendron. |
| Exobasidium..... | Rhododendrons. |
| Exobasidium azaleae..... | Azalea hinodegiri. |
| Exobasidium vaccinii..... | Rhododendron wilsonii. |
| Pestalozzia sp..... | Rhododendrons. |
| INDIA. | |
| Insects: | |
| Calandra oryza (rice weevil)..... | Saraca indica. |
| Tribolium ferrugineum (rust-red flour beetle)..... | Papaver somniferum (seed). |
| IRELAND. | |
| Disease: | |
| Coniosporium shiraianum..... | Bambusa. |
| JAPAN. | |
| Insects: | |
| Agromyza schineri (Agromyzidae)..... | Wistaria. |
| Aspidiotus perniciosus (San Jose scale)..... | Prunus. |
| Balaninus robustus (Curculionidae)..... | Quercus sp. |
| Chinnaspis sp. (scale insect)..... | Prunus. |
| Cicada eggs..... | Persimmons. |
| Diaspis pentagona (West Indian peach scale)..... | Prunus serrulata. |
| Do..... | Prunus sp. (4). |
| Hemichionaspis aspidistrae (Aspidistra scale)..... | Aspidistra lurida (3). |
| Lecanium kunoensis (scale insect)..... | Plums. |
| Lepidosaphes sp. (scale insect)..... | Prunus sp. |
| Olethreutid..... | Prunus budwood. |
| Parlatoria pergandei theae (scale insect)..... | Prunus sp. |
| Parlatoria sp. (scale insect)..... | Camellias. |
| Do..... | Prunus sp. (2). |
| Pseudaonidia duplex (scale insect)..... | Azaleas. |
| Do..... | Camellia. |
| Do..... | Plums. |
| Pseudococcus comstocki (scale insect)..... | Persimmons. |
| Pseudococcus sp. (scale insect)..... | Do. |

List, by countries, of pests collected and reported from Jan. 1 to Mar. 31, 1919, inclusive—Continued.

| Country of origin and name of pest. | Host. |
|--|----------------------------------|
| JAPAN—continued. | |
| Insects—Continued. | |
| Pseudococcus sp. (scale insect)..... | Wisataria. |
| Thyridopteryx ephemeriformis (bag worm)..... | Daphne. |
| Tortricid..... | Quercus mongolia. |
| Diseases: | |
| Fusarium sp..... | Lithocarpus brevicandata. |
| Pestalozzia sp..... | Do. |
| Do..... | Prunus sp. |
| Pseudomonas citri..... | Citrus sp. |
| JAVA. | |
| Insects: | |
| Araecerus fasciculatus (coffee bean weevil)..... | Nephelium lappaceum. |
| Aspidiotus lataniae (scale insect)..... | Livistona altissima. |
| Saissetia nigra (scale insect)..... | Do. |
| Diseases: | |
| Aspergillus sp..... | Lansium domesticum (seeds). |
| Sclerotium rolfsii..... | Mangifera indica var. wangi. |
| MEXICO. | |
| Insects: | |
| Araecerus fasciculatus (coffee bean weevil)..... | Ramon. |
| Carpophilus dimidiatus (Nitidulidae)..... | Do. |
| Cocotrypes sp. (Scolytidae)..... | Annona diversifolia (seed). |
| Sitotroga cerealella (Gelechiidae)..... | Palms. |
| Do..... | Purple rice. |
| Stratiomyid..... | Anacardium sp. |
| NICARAGUA. | |
| Insects: | |
| Pachybruchus excellens (weevil)..... | Ipomoea (seeds). |
| Pachybruchus leucospilus (weevil)..... | Do. |
| PHILIPPINE ISLANDS. | |
| Insects: | |
| Calandra oryza (rice weevil)..... | Corn. |
| Cathartus advena (foreign brain beetle)..... | Do. |
| Chrysomphalus sp. (scale insect)..... | Citrus excelsa. |
| Do..... | Japanese orange. |
| Lepidosaphes beckii (purple scale)..... | Do. |
| Parlatoria zizyphus (scale insect)..... | Citrus excelsa. |
| Do..... | Japanese orange. |
| Setomorpha insectella (Tineidae)..... | Normanbya merrillii (palm seed). |
| Diseases: | |
| Colletotrichum gloeosporioides..... | Citrus excelsa (budwood). |
| Do..... | Citrus sp. (Japanese orange). |
| Glomerella cingulata..... | Citrus excelsa (budwood). |
| SCOTLAND. | |
| Insect: | |
| Emphytus cinctus (sawfly)..... | Manetti stocks. |
| Disease: | |
| Bacterium tumefaciens (crown gall)..... | Do. |
| STRAITS SETTLEMENTS. | |
| Diseases: | |
| Diplodia sp..... | Attalea spectabilis. |
| Do..... | Scheelia regia. |
| VENEZUELA. | |
| Insects: | |
| Coccus sp. (scale insect)..... | (?). |
| Protopulvinaria pyriformis (scale insect)..... | (?). |
| Pseudococcus adonidum (long-tailed mealy bug)..... | Botanical specimen. |

LIST, BY STATES, OF PESTS COLLECTED AND REPORTED FROM JAN. 1 TO MAR. 31, 1919, INCLUSIVE.

[The number in parenthesis following name of country indicates the number of times reported, if collected more than once.]

| State in which collected and name of pest. | Host. | Country of origin. | Collector. |
|--|-----------------------------|-------------------------|-----------------------|
| CALIFORNIA. | | | |
| Insects: | | | |
| Agromyza schiner (Agromyzidae)..... | Wistaria..... | Japan..... | C. H. Vary. |
| Cicada eggs..... | Persimmons..... | do..... | A. C. Fleury. |
| Diaspis carueli (juniper scale)..... | Thuya orientalis..... | France..... | L. A. Whitney. |
| Hemichionaspis aspidistrae (Aspidistra scale)..... | Aspidistra lurida..... | Japan (3)..... | C. H. Vary. |
| Lecanium kunoensis (scale insect)..... | Plums..... | Japan..... | A. and S. Chatterley. |
| Lepidosaphes ulmi (oyster-shell scale)..... | Boxwood..... | Holland..... | C. H. Vary. |
| Microceromasiasphenophori (Muscidae)..... | Sugar cane..... | Hawaii..... | L. A. Whitney. |
| Pachybruchus excellens (Bruchidae)..... | Ipomoea (seeds)..... | Nicaragua..... | Do. |
| Pachybruchus leucospilus (Bruchidae)..... | do..... | do..... | Do. |
| Parlatoria sp. (scale insect)..... | Camellias..... | Japan..... | C. H. Vary. |
| Phthorimaea operculella (Gelechiidae)..... | Potatoes..... | Argentina..... | A. C. Fleury. |
| Pseudonidia duplex (scale insect)..... | Azaleas..... | Japan..... | Do. |
| Do..... | Camellia..... | do..... | Do. |
| Do..... | Plums..... | do..... | A. and S. Chatterley. |
| Pseudococcus comstocki (scale insect)..... | Persimmons..... | do..... | Do. |
| Pseudococcus sp. (scale insect)..... | do..... | do..... | J. W. Mashmeyer. |
| Do..... | Wistaria..... | do..... | Do. |
| Saissetia hemispherica (hemispherical scale)..... | Boxwood..... | Holland..... | C. H. Vary. |
| Sphenophorus obscurus (sugar cane borer)..... | Sugar cane..... | Hawaii..... | L. A. Whitney. |
| Thyridopteryx ephemeraeformis (bag worm)..... | Daphne..... | Japan..... | C. H. Vary. |
| CONNECTICUT. | | | |
| Insects: | | | |
| Curculionid..... | (?)..... | Holland..... | B. H. Walden. |
| Emphytus cinctus (sawfly)..... | Fruit stocks..... | France..... | K. F. Chamberlain. |
| Do..... | Manetti rose stocks..... | England (3)..... | M. P. Zappe. |
| Do..... | do..... | France..... | K. F. Chamberlain. |
| Do..... | Manetti stocks..... | Holland..... | Do. |
| Do..... | do..... | Scotland..... | M. P. Zappe. |
| Do..... | Rose stocks..... | France..... | Do. |
| Leidosaphes ulmi (oyster-shell scale)..... | Boxwood..... | Holland..... | Do. |
| Do..... | (?)..... | do..... | K. F. Chamberlain. |
| Diseases: | | | |
| Bacterium tumefaciens (crown gall)..... | Fruit stocks..... | France..... | Do. |
| Do..... | Manetti rose stocks..... | England (2)..... | M. P. Zappe. |
| Do..... | do..... | France..... | Do. |
| Do..... | Manetti stocks..... | Holland (2)..... | Do. |
| Do..... | do..... | Scotland..... | K. F. Chamberlain. |
| Do..... | Rose stocks..... | France..... | M. P. Zappe. |
| DISTRICT OF COLUMBIA. | | | |
| Insects: | | | |
| Anthocorid..... | Potato (tubers)..... | Ecuador..... | H. L. Sanford. |
| Anthocoris sp..... | Carica wood..... | do..... | N. Perrine. |
| Araecerus fasciculatus (coffee bean weevil)..... | Mangifera indica..... | China..... | Do. |
| Do..... | Nephelium lappaceum..... | Java..... | H. L. Sanford. |
| Do..... | Ramon..... | Mexico..... | Do. |
| Aspidiotus lataniae (scale insect)..... | Livistona altissima..... | Java..... | N. Perrine. |
| Aspidiotus perniciosus..... | Prunus..... | Japan..... | H. L. Sanford. |
| Balaninus robustus (Curculionidae)..... | Quercus sp..... | do..... | Do. |
| Bruchid..... | Prosopis horrida..... | Ecuador..... | Do. |
| Bruchus ipomeae (weevil)..... | Ipomoea..... | Ecuador (2)..... | N. Perrine. |
| Bruchus sp..... | Vigna..... | China..... | E. R. Sasscer. |
| Do..... | (?)..... | Brazil..... | N. Perrine. |
| Calandra granaria (Granary weevil)..... | Zea mays (giant white)..... | Australia..... | Do. |
| Calandra oryza (rice weevil)..... | Corn..... | Philippine Islands..... | C. A. Weigel. |
| Do..... | Saraca indica..... | India..... | H. L. Sanford. |

List, by States, of pests collected and reported from Jan. 1 to Mar. 31, 1919, inclusive—Continued.

| State in which collected and name of pest. | Host. | Country of origin. | Collector. |
|--|--------------------------------------|----------------------|------------------|
| DISTRICT OF COLUMBIA—continued. | | | |
| Insects—Continued. | | | |
| <i>Calandra oryza maidis</i> (rice weevil)... | Litchi chinensis..... | China..... | H. L. Sanford. |
| <i>Carpophilus dimidiatus</i> (Nitidulidae)... | Oxalis (tubers)..... | Ecuador..... | N. Perrine. |
| Do..... | Ramon..... | Mexico..... | H. L. Sanford. |
| <i>Caryoborus</i> sp. (Bruchidae)..... | <i>Orbignia graciosa</i> | Brazil..... | N. Perrine. |
| Do..... | (?)..... | do..... | Do. |
| <i>Cathartus advena</i> (foreign grain beetle)... | Citrus fruits..... | China..... | Do. |
| Do..... | Corn..... | Philippine Islands.. | H. L. Sanford. |
| Do..... | Litchi chinensis..... | China..... | N. Perrine. |
| Do..... | do..... | China (2)..... | H. L. Sanford. |
| Do..... | Potato (tubers)..... | Ecuador..... | Do. |
| <i>Catorama</i> sp. (Ptinidae)..... | (?)..... | Brazil..... | N. Perrine. |
| <i>Chionaspis citri</i> (scale insect)..... | Citrus nobilis..... | China..... | Do. |
| <i>Chionaspis</i> sp. (scale insect)..... | Prunus..... | Japan..... | H. L. Sanford. |
| <i>Chrysomphalus</i> sp. (scale insect)..... | Citrus excelsa..... | Philippine Islands.. | Do. |
| Do..... | Japanese orange..... | do..... | Do. |
| <i>Coccotrypes</i> sp. (Scolytidae)..... | <i>Annona diversifolia</i> (seed)... | Mexico..... | E. R. Sasser. |
| <i>Coccus</i> sp. (scale insect)..... | (?)..... | Venezuela..... | H. L. Sanford. |
| <i>Diaspis echinocacti cacti</i> (scale insect)... | <i>Opuntia</i> | Colombia..... | Do. |
| <i>Diaspis pentagona</i> (West Indian peach scale)... | <i>Prunus serrulata</i> | Japan..... | Do. |
| Do..... | <i>Prunus</i> sp..... | Japan (2)..... | N. Perrine. |
| Do..... | do..... | Japan..... | H. L. Sanford. |
| Do..... | do..... | do..... | C. A. Weigel. |
| <i>Lasiochilus</i> sp. (Anthocoridae)..... | Beans..... | Ecuador..... | N. Perrine. |
| <i>Lecanium corni</i> (European fruit Lecanium)... | Boxwood..... | Holland..... | C. A. Weigel. |
| <i>Lepidosaphes beckii</i> (purple scale)..... | Japanese orange..... | Philippine Islands.. | H. L. Sanford. |
| Do..... | Rangpur lime..... | Cuba..... | Do. |
| <i>Lepidosaphes</i> sp. (scale insect)..... | <i>Prunus</i> sp..... | Japan..... | C. A. Weigel. |
| <i>Limonium</i> sp. (Elateridae)..... | Narcissus bulbs..... | Holland..... | H. F. Dietz. |
| <i>Olethreutes</i> sp. (Tortricidae)..... | Legume..... | Ecuador..... | N. Perrine. |
| <i>Olethreutid</i> | <i>Prunus</i> (budwood)..... | Japan..... | C. A. Weigel. |
| <i>Parlatoria pergandei theae</i> (scale insect)... | <i>Prunus</i> sp..... | do..... | Do. |
| <i>Parlatoria</i> sp. (scale insect)..... | do..... | Japan (2)..... | Do. |
| <i>Parlatoria zizyphus</i> (scale insect)..... | Citrus excelsa..... | Philippine Islands.. | H. L. Sanford. |
| Do..... | Japanese orange..... | do..... | Do. |
| <i>Pectinophora gossypiella</i> (pink boll-worm)... | Cotton..... | Africa..... | J. A. Stevenson. |
| Do..... | Cotton seed..... | China (2)..... | H. L. Sanford. |
| <i>Pentatomid</i> | Grass seed..... | Brazil..... | N. Perrine. |
| <i>Phalacrus</i> sp. (Phalacridae)..... | <i>Paspalum</i> sp..... | do..... | Do. |
| <i>Phanerotoma</i> sp. (Braconidae)..... | (?)..... | do..... | Do. |
| <i>Plectoptera floridana</i> (Blattidae)..... | Creeping bamboo..... | Bahamas..... | Do. |
| <i>Protopulvinaria pyriformis</i> (scale insect)... | (?)..... | Venezuela..... | H. L. Sanford. |
| <i>Pseudococcus adonidum</i> (long-tailed mealy bug)... | Botanical specimen..... | do..... | Do. |
| <i>Pyalid</i> | (?)..... | Brazil..... | N. Perrine. |
| <i>Pyalis farinalis</i> (Pyalidae)..... | French hyacinth (bulbs)... | France..... | Do. |
| Do..... | Narcissus (bulbs)..... | do..... | Do. |
| <i>Rhizopertha dominica</i> (lesser grain borer)... | <i>Cordeauxia edulia</i> | Arabia..... | Do. |
| <i>Rhyssomatus</i> sp. (Curculionidae)..... | <i>Ipomoea</i> | Ecuador..... | Do. |
| <i>Saissetia nigra</i> (scale insect)..... | <i>Kokia drynarioides</i> | Hawaii..... | H. L. Sanford. |
| Do..... | <i>Livistona altissima</i> | Java..... | Do. |
| <i>Scolytid</i> | Apple (?) (mealy)..... | Africa..... | Do. |
| <i>Setomorpha insectella</i> (Tineidae)..... | <i>Normanbya merrillii</i> | Philippine Islands.. | Do. |
| <i>Silvanus surinamensis</i> (saw-toothed grain beetle)... | <i>Cordeauxia edulia</i> | Arabia..... | N. Perrine. |
| <i>Sitotroga cerealella</i> (Gelechiidae)..... | Palms..... | Mexico..... | H. L. Sanford. |
| Do..... | Purple rice..... | do..... | Do. |
| <i>Stratiomyid</i> | <i>Anacardias</i> sp..... | do..... | N. Perrine. |
| <i>Tachyporus chrysomelinus</i> (Staphylinidae)... | Currant plants..... | England..... | H. L. Sanford. |

List, by States, of pests collected and reported from Jan. 1 to Mar. 31, 1919, inclusive—Continued.

| State in which collected and name of pest. | Host. | Country of origin. | Collector. |
|--|--------------------------------------|--------------------------|------------------|
| DISTRICT OF COLUMBIA—continued. | | | |
| Insects—Continued. | | | |
| Tortricid..... | Quercus mongolia..... | Japan..... | H. L. Sanford. |
| Tribolium confusum (confused flour beetle)..... | Cordeauxia edulia..... | Arabia..... | N. Perrine. |
| Tribolium ferrugineum (rust-red flour beetle)..... | Papaver somniferum (seed)..... | India..... | H. L. Sanford. |
| Zelus sp. (Reduviidae)..... | Potato (tubers)..... | Ecuador..... | Do. |
| Diseases: | | | |
| Aspergillus sp..... | Lansium domesticum (seeds)..... | Java..... | J. T. Rogers. |
| Claviceps purpurea..... | Phalaris carulescens (seeds)..... | Africa..... | Do. |
| Colletotrichum gloeosporioides..... | Citrus excelsa..... | Philippine Islands..... | Do. |
| Do..... | Japanese orange..... | do..... | Do. |
| Colletotrichum sp..... | Orchids..... | Ecuador..... | Do. |
| Coniosporium shiraianum..... | Bambusa..... | Ireland..... | J. A. Stevenson. |
| Diplodia sp..... | Attalea spectabilis..... | Straits Settlements..... | Do. |
| Do..... | Scheelia regia..... | do..... | G. H. Kauffman. |
| Fusarium oxysporum..... | Solanum tuberosum (tubers)..... | England..... | J. T. Rogers. |
| Fusarium sp..... | Lithocarpus brevicandata..... | Japan..... | Do. |
| Glomerella cingulata..... | Citrus excelsa..... | Philippine Islands..... | Do. |
| Pestalozzia sp..... | Lithocarpus brevicandata..... | Japan..... | Do. |
| Do..... | Prunus sp..... | do..... | J. A. Stevenson |
| Phyllachora sp..... | Andropogon sp..... | Brazil..... | J. T. Rogers. |
| Do..... | Panicum geminatum..... | do..... | Do. |
| Phytophthora infestans..... | Solanum tuberosum (tubers)..... | England..... | Do. |
| Rhizoctonia..... | do..... | do..... | Do. |
| Sclerotinia sp..... | Raphanus sativus (radish seeds)..... | Brazil..... | Do. |
| Sclerotium rolfsii..... | Mangifera indica..... | Java..... | Do. |
| Ustilago sp..... | Panicum geminatum..... | Brazil..... | Do. |
| Vermicularia sp..... | Orchids..... | Ecuador..... | Do. |
| INDIANA. | | | |
| Insects: | | | |
| Emphytus cinctus (sawfly)..... | Manetti rose stocks..... | France (2)..... | E. Smith. |
| Do..... | Rose stocks..... | England (2)..... | Do. |
| Diseases: | | | |
| Bacterium tumefaciens (crown gall)..... | Manetti rose stocks..... | France..... | Do. |
| Do..... | Rose stocks..... | do..... | Do. |
| IOWA. | | | |
| Insect: | | | |
| Julus sp..... | Hydrangea..... | Holland..... | E. D. Ball. |
| MASSACHUSETTS. | | | |
| Insects: | | | |
| Lepidosaphes ulmi (oyster-shell scale)..... | Boxwood..... | do..... | C. W. Nash. |
| Do..... | do..... | do..... | L. H. Taylor. |
| Porthetria dispar (gipsy moth)..... | Apple..... | France..... | W. S. Regan. |
| Do..... | Manetti stocks..... | do..... | Do. |
| Diseases: | | | |
| Bacterium tumefaciens (crown gall)..... | Manetti rose stocks..... | do..... | Do. |
| Exobasidium..... | Rhododendrons..... | Holland..... | C. W. Nash. |
| MISSOURI. | | | |
| Insect: | | | |
| Lepidosaphes ulmi (oyster-shell scale)..... | Boxwood..... | do..... | W. E. Hoffman. |
| Disease: | | | |
| Bacterium tumefaciens (crown gall and hairy root)..... | Fruit stocks..... | France..... | K. C. Sullivan. |
| NEW JERSEY. | | | |
| Insects: | | | |
| Lepidosaphes ulmi (oyster-shell scale)..... | Apple..... | England..... | E. West. |
| Do..... | Boxwood..... | Holland (2)..... | Geo. L. Walters. |
| Do..... | do..... | Holland..... | E. West. |

List, by States, of pests collected and reported from Jan. 1 to Mar. 31, 1919, inclusive—Continued.

| State in which collected and name of pest. | Host. | Country of origin. | Collector. |
|---|-------------------------------------|--------------------|-----------------|
| NEW JERSEY—continued. | | | |
| Diseases: | | | |
| Bacterium tumefaciens (crown gall)... | Azalea mollis (hybrids)..... | Holland | E. West. |
| Botrytis cinerea..... | Rhododendrons..... | Holland (3)..... | Do. |
| Botrytis sp..... | do..... | Holland..... | Do. |
| NORTH CAROLINA. | | | |
| Insect: | | | |
| Lepidosaphes ulmi (oyster-shell scale)..... | Boxwood..... | do..... | F. Sherman. |
| OHIO. | | | |
| Insects: | | | |
| Lepidosaphes ulmi (oyster-shell scale)..... | do..... | do..... | C. H. Waid. |
| Notolophus antiqua (European tussock-moth)..... | Pear seedling..... | France..... | H. E. Evans. |
| Diseases: | | | |
| Bacterium tumefaciens (crown gall)..... | Pear..... | do..... | H. J. Speaker. |
| Bacterium tumefaciens (hairy root)..... | Quince seedling..... | do..... | H. E. Evans. |
| Bacterium tumefaciens..... | Rose stocks..... | England..... | R. Faxon. |
| PENNSYLVANIA. | | | |
| Insects: | | | |
| Acronycta rumicis (Noctuidae)..... | Azalea amoena..... | Holland..... | J. K. Primm. |
| Agonopteryx ocellana (Oecophoridae)..... | Boxwood..... | do..... | G. B. Stichter. |
| Do..... | Rhododendrons..... | do..... | Do. |
| Carabus nemoralis (Carabidae)..... | In soil (around Juniper roots)..... | do..... | J. K. Primm. |
| Diaspis carueli (scale insect)..... | Thuya occidentalis..... | do..... | F. M. Trimble. |
| Emphytus cinctus (sawfly)..... | Manetti rose stocks..... | France..... | Do. |
| Do..... | Rose stocks..... | England..... | Do. |
| Gryllotalpa gryllotalpa (common European mole cricket)..... | Azaleas..... | Holland..... | J. K. Primm. |
| Magdalis sp. (Curculionidae)..... | Cydonia japonica..... | France..... | F. M. Trimble. |
| Malacosoma dissitria (forest tent-caterpillar)..... | Andromeda floribunda..... | Holland..... | J. K. Primm. |
| Malacosoma sp. (Lasiocampidae)..... | do..... | do..... | Do. |
| Lecanium corni (European fruit Lecanium)..... | Ampelopsis engelmanni..... | France..... | Do. |
| Do..... | Boxwood..... | Holland (2)..... | Do. |
| Do..... | do..... | do..... | P. M. Richards. |
| Do..... | do..... | do..... | F. M. Trimble. |
| Lecanium fletcheri (scale insect)..... | Thuya occidentalis..... | Holland..... | J. K. Primm. |
| Do..... | Thuya occidentalis lutea..... | do..... | Do. |
| Lepidosaphes ulmi (oyster-shell scale)..... | Boxwood..... | France..... | P. M. Richards. |
| Do..... | do..... | Holland..... | T. L. Guyton. |
| Do..... | do..... | Holland (3)..... | J. K. Primm. |
| Do..... | do..... | Holland (2)..... | P. M. Richards. |
| Do..... | do..... | Holland (11)..... | F. M. Trimble. |
| Leptobyrza explanata (Tingitidae)..... | Rhododendrons..... | Holland..... | J. K. Primm. |
| Do..... | do..... | do..... | F. M. Trimble. |
| Pemphigus bursarius (Aphididae)..... | Lombardy poplar..... | France..... | J. K. Primm. |
| Phytomyza aquifolii (Agromyzidae)..... | Holly..... | Holland..... | Do. |
| Do..... | do..... | do..... | P. M. Richards. |
| Porthesia similis (gold-tail moth)..... | Acer atrapupurea..... | do..... | F. M. Trimble. |
| Psylla buxi (box psylla)..... | Boxwood..... | Holland (4)..... | J. K. Primm. |
| Do..... | do..... | Holland (2)..... | P. M. Richards. |
| Do..... | do..... | Holland..... | G. B. Stichter. |
| Do..... | do..... | Holland (4)..... | F. M. Trimble. |
| Psylla sp. (Psyllidae)..... | do..... | Holland..... | G. B. Stichter. |
| Diseases: | | | |
| Bacterium tumefaciens (crown gall)... | Ampelopsis engelmanni..... | France..... | J. K. Primm. |
| Do..... | Azalea..... | Holland..... | Do. |
| Do..... | Azalea narcissiflora..... | do..... | Do. |
| Do..... | Eleagnus longipes..... | France..... | F. M. Trimble. |
| Do..... | Poplar..... | do..... | J. K. Primm. |
| Do..... | Rhododendron..... | Holland..... | Do. |

List, by States, of pests collected and reported from Jan. 1 to Mar. 31, 1919, inclusive—Continued.

| State in which collected and name of pest. | Host. | Country of origin. | Collector. |
|---|---------------------------------|--------------------|------------------|
| PENNSYLVANIA—continued. | | | |
| <i>Diseases—Continued,</i> | | | |
| Exobasidium azaleae..... | Azalea hinodegiri..... | Holland..... | F. M. Trimble. |
| Exobasidium vaccinii..... | Rhododendron wilsonii..... | do..... | Do. |
| Pestalozzia sp..... | Rhododendrons..... | do..... | Do. |
| TENNESSEE. | | | |
| <i>Insect:</i> | | | |
| Odynerus sp..... | Fruit stock..... | France..... | L. A. Blake. |
| VIRGINIA. | | | |
| <i>Insects:</i> | | | |
| Lecanium corni (European fruit Lecanium). | Boxwood..... | Holland..... | G. W. Underhill. |
| Lecanium sp. (scale insect)..... | do..... | do..... | Do. |
| Lepidosaphes ulmi (oyster-shell scale)..... | do..... | Holland (4)..... | Do. |
| Otiorynchid..... | Soil (around roots of conifers) | Holland..... | R. R. Reppert. |
| <i>Diseases:</i> | | | |
| Bacterium tumefaciens (hairy root)..... | Apple seedlings..... | France..... | G. W. Underhill. |
| Do..... | Plum seedlings..... | do..... | Do. |
| WASHINGTON. (Federal inspection.) | | | |
| <i>Disease:</i> | | | |
| Pseudomonas citri..... | Citrus sp. (fruit)..... | Japan..... | A. G. Webb |